

Approved for use through 04/30/2003. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

(use as many sheets as necessary)

Complete if Known

Application Number	10/707,522
Filing Date	December 19, 2003
First Named Inventor	John T. Stites
Art Unit	3711
Examiner Name	Stephen Luther Blau
Attorney Docket Number	005127.00273

Sheet	1	of	2
-------	---	----	---

[illegible][illegible]

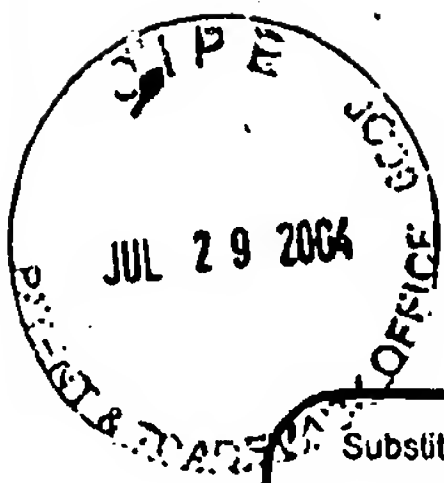
**Examiner
Signature**

Date Considered

***EXAMINER:** Initial if reference considered whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



PTO/SB/08b(05-03)

Approved for use through 04/30/2003. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 2 of 2

Complete if Known

Application Number	10/707,522
Filing Date	December 19, 2003
First Named Inventor	John T. Stites
Group Art Unit	3711
Examiner Name	Stephen Luther Blau
Attorney Docket Number	005127.00273

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		International Search Report, dated June 30, 2004, 5 pages	

Examiner
Signature

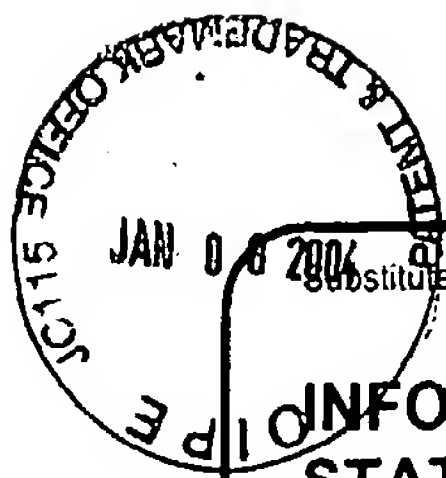
Date
Considered

9/6/04

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 1 of 4

Complete if Known

Application Number	10/707,522
Filing Date	December 19, 2003
First Named Inventor	John Thomas Stites, et al
Art Unit	T/B/D
Examiner Name	T/B/D
Attorney Docket Number	005127.00273

U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
B		US-6592469	07/15/2003	Gilbert	
B		US- 6015354	01/18/2000	Ahn, et al	
B		US- 5484146	01/16/1996	Loschiaro	
B		US- 6450897	01/17/2002	Stites	
B		US- 5330187	07/19/1994	Schmidt, et al	
B		US- 5472203	12/05/1995	Schmidt, et al	
B		US- 5749795	05/12/1998	Schmidt, et al	
B		US- 5282625	02/01/1994	Schmidt, et al	
B		US- 6210290	04/03/2002	Erickson, et al	
B		US- 6045456	04/04/2000	Best, et al	
B		US- 5333872	08/02/1994	Manning, et al	
B		US- 5738596	04/19/1998	Meyer	
B		US- 6290607	09/18/2001	Gilbert, et al	
B		US- 5395113	03/07/1997	Antonious	
B		US- 5873795	02/23/1999	Wozny, et al	
B		US- 6315678	11/13/2001	Teramoto	
B		US- 6450897	09/17/2002	Stites, et al	
B		US- 5328184	07/12/1994	Antonious	
B		US- 6030295	02/29/2000	Takeda	
B		US- 5549297	08/27/1996	Mahaffey	

FOREIGN PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				
B		GB2365785	2/27/2002	Guillermo		
B		Abstract JP200210400	8/02/2000	Shimazaki Hideo		
B		Abstract JP2001087430	4/03/2001	Honma Hiroaki		
B		Abstract JP2001190720	7/17/2001	Nishitani Masashi		
B		Abstract JP2001161870	6/19/2001	Chazono Kiyotaka, et al		
B		Abstract JP2002186696	7/2/2002	Osumi Hiroaki, et al		
B		Abstract JP2001009070	1/16/2001	Kawase Haruo, et al		
B		Abstract JP2001204863	7/31/2001	Onoda Kenji, et al		
B		Abstract JP2002143355	5/21/2002	Doi Kazuhiro, et al		

Examiner
SignatureDate
Considered

9/6/04

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT

STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet

2

of

4

First Named Inventor

John Thomas Stites, et al

Art Unit

T/B/D

Examiner Name

T/B/D

Attorney Docket Number

005127.00273

U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
A B C D E F G H I J K L M N		US-6080069	06/27/2000	Long	
		US- 5658208	08/19/1997	Shimasaki	
		US- 6280348	08/28/2001	Stites	
		US- 6077173	06/20/2000	Stites	
		US- 6277032	08/21/2001	Smith	
		US- 5385348	01/31/95	Wargo	
		US- 5584770	12/17/1996	Jensen	
		US- 5264533	11/23/1993	Rehmer	
		US- 4826172	05/02/1989	Antonious	
		US- 5916042	06/29/1999	Reimers	
		US- Des. 371182	06/25/1998	Stites	
		US- 20030199331	10/23/2003	Stites	
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			

FOREIGN PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				
A B C D E F G H I J		Abstract JP2000093566	4/4/2000	Kimura Takuji, et al		
		Abstract JP2000005357	1/11/2000	Masuda Naoyuki, et al		
		Abstract JP2000005356	1/11/2000	Masuda Naoyuki, et al		
		Abstract JP2000334073	12/5/2000	Abe Eiji		
		Abstract JP2000345204	12/12/2000	Abe Eiji		
		Abstract JP09-135933	5/27/1997	Chin Kuyu		
		Abstract JP10-005377	1/13/1998	Kajita Ryota		
		Abstract JP09-285576	11/4/1997	Yoneyama Minoru		
		Abstract JP2001046560	2/20/2001	Takeda Hitoshi		

Examiner
Signature

[Handwritten Signature]

Date
Considered

9/6/04

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet	3	of	4
-------	---	----	---

Complete if Known

Application Number	10/707,522
Filing Date	December 19,
First Named Inventor	John Thomas
Art Unit	T/B/D
Examiner Name	T/B/D
Attorney Docket Number	005127.00273

U.S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ^o
		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				
B B B B B B B		Abstract JP2001079124	3/27/2001	Demukai Noboru		
		Abstract JP2002191729	7/10/2002	Kawase Haruo, et al		
		Abstract JP11-047322	2/23/1999	Matsuo Yoshikazu, et al		
		GB232563	3/18/1925	Chemische Fabrik, et al		
		GB2316011	2/18/1998	Taylor Made Golf Company		
		WO 93/15151	8/05/1993	Union Camp Corporation		

**Examiner
Signature**

Date Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 4 of 4

Application Number	10/707,522
Filing Date	December 19, 2003
First Named Inventor	John Thomas Stites, et al
Group Art Unit	T/B/D
Examiner Name	T/B/D
Attorney Docket Number	005127.00273

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		Ben Hogan Apex Edge CFT Iron Publication; five pages	
		Nicklaus CGX Iron Publication; two pages	

Examiner
Signature

Date
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.